INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/41488

A. CLASSIFICATION OF SUBJECT MATTER				
IPC(7) : B21C 3/02 US CL : 72/467; 76/107.4				
US CL: 72/467; 76/107.4 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols)				
U.S.: 72/467; 76/107.4				
}				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.	
X	US 4,392,397 A (ENGELFRIET et al) 12 July 198	3 (12.07.1983), see Figures 4-7 and	1-5 and 10-17	
1 ==	column 5, lines 30-62, and column 6, lines 1-4.			
Y			6-9 and 18-20	
Y	US 2,027,787 A (RIDGWAY et al) 14 January 193	6 (14 01 1936) see the Figure and	6-8, 19 and 20	
1 .	page 4, column 2, lines 35-70.	0-6, 19 and 20		
A	US 1,597,927 A (SIMONS) 31 August 1926 (31.08.1926), see Figures 3 and 5.		2	
A	US 4,145,910 A (SCHEEL) 27 March 1979, (27.03.1979), see Figures 1 and 2.		1-20	
A	US 4,241,625 A (CORBIN et al) 30 December 1980 (30.12.1980), see Figure 4.		1-20	
A	US 4,260,397 A (BOVENKERK) 07 April 1981 (0 and column 6, lines 1-3.	7.04.1981), see column 5, lines 55-67,	1-20	
	and column o, thies 1-3.			
· ·			}	
İ			1	
			}	
<u></u>			<u> </u>	
Further documents are listed in the continuation of Box C.		See patent family annex.		
s s	pecial categories of cited documents:	"T" later document published after the int date and not in conflict with the appli		
	defining the general state of the art which is not considered to be	principle or theory underlying the inv		
`		"X" document of particular relevance; the		
"E" carlier ap	oplication or patent published on or after the international filing date	considered novel or cannot be consid	ered to involve an inventive step	
	which may throw doubts on priority claim(s) or which is cited to		alarmad museum er eks	
specified	the publication date of another citation or other special reason (as	"Y" document of particular relevance, the considered to involve an inventive ste		
"O" document	referring to an oral disclosure, use, exhibition or other means	combined with one or more other suc being obvious to a person skilled in the		
	-	-		
	t published prior to the international filing date but later than the late claimed	"&" document member of the same patent	tamily	
Date of the a	Date of the actual completion of the international search Date of railing of the international search report			
26 April 2005 (26.04.2005)		₩ 4 J UN £UU5		
			4 1-0	
Mail Stop PCT, Attn: ISA/US		Mul- // like of		
Commissioner for Patents P.O. Box 1450		Darliel C Crane		
Alexandria, Virginia 22313-1450		Telephone No. 703-308-1078		
Facsimile No. (703) 305-3230				